

- 1           1. An apparatus for switching library managers, the apparatus comprising:
  - 2               a communications module configured to receive a directive to transition library
  - 3 management functions from a first library manager to a second library manager, the
  - 4 communications module further configured to communicate with the first library
  - 5 manager, the second library manager, and a host computer.
  - 6               a control module configured to direct the first library manager to reject data
  - 7 transaction commands while maintaining the storage device in a state responsive to data
  - 8 transaction actions; also suspend the library management function of the first library
  - 9 manager; and activate the library management function of the second library manager.
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- 11          2. The apparatus of claim 1, further comprising a timing module, the timing module
- 12 configured to receive a timeout directive, and to initiate a timeout period.
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- 14          3. The apparatus of claim 2, wherein the control module is configure to suspend the
- 15 library management function of the first library manager responsive to the completion of
- 16 the timeout period.
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- 18          4. The apparatus of claim 1, wherein the first library manager is configure to store an
- 19 accepted data transaction command.
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- 21          5. The apparatus of claim 4, wherein the first library manager is configure to execute a
- 22 previously accepted data transaction command.
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- 24          6. The apparatus of claim 4, wherein the control module is configure to terminate the
- 25 processing of the previously accepted data transaction command.
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1 7. The apparatus of claim 4, wherein the control module is configure to transfer  
2 accepted data transaction commands from the first library manager to the second library  
3 manager.  
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5 8. The apparatus of claim 1, wherein the first library manager is configure to accept a  
6 select data transaction command type.  
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8 9. The apparatus of claim 1, wherein the control module is configure to terminate the  
9 library manager transition.  
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11 10. An apparatus for switching the library manager of a data library, the apparatus  
12 comprising:

13 a storage device responsive to a first library manager and a second library  
14 manager, wherein the storage device retrieves and stores data; and

15 a transition manager module configured to receive a directive for a library  
16 manager transition; command the first library manager to reject data transaction  
17 commands; maintain the storage device responsive to data transaction commands; and  
18 command the second library manager to receive data transaction commands.  
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20 11. The apparatus of claim 10, wherein the first library manager is further configured to  
21 accept a select data transaction command type.  
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- 1 12. An apparatus for switching library managers, the apparatus comprising:  
2 means for managing a data transaction command;  
3 means for completing a data transaction command;  
4 means for rejecting a data transaction command;  
5 means for maintaining the completing means responsive to data transaction  
6 commands;  
7 means for suspending the library management functions of a first managing  
8 means; and  
9 means for activating the library management functions of a second managing  
10 means.  
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12 13. The apparatus of claim 12, further comprising means for storing the data transaction  
13 command;  
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15 14. The apparatus of claim 12, further comprising means for executing the stored data  
16 transaction command.  
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1 15. A system for switching library managers, the system comprising:

2 a first library manager configured to accept and execute a data transaction  
3 command;

4 a second library manager configured to accept and execute the data transaction  
5 command;

6 a storage device configured to receive the data transaction command from the first  
7 library manager and the second library manager; and

8 a transition manager module configured to receive a directive for a library  
9 manager transition; direct the first library manager to reject data transaction commands  
10 while maintaining the storage device responsive to data transaction commands; suspend  
11 the library management function of the first library manager; and to activate the library  
12 management function of the second library manager.

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14 16. The system of claim 15, wherein the first library manager is further configured to  
15 accept a select data transaction command type during a library manager transition.

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17 17. The system of claim 15, wherein the transition manager module is configured to  
18 notify a host computer that the library manager transition is in process.

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20 18. The system of claim 15, wherein the transition manager module is configured to  
21 suspend the library manager transition; to direct the first library manager to accept data  
22 transaction commands; and notify the host computer that the first library manager is  
23 accepting data transaction commands.

- 1 19. A method for switching library managers, the method comprising:
- 2       rejecting a data transaction command;
- 3       maintaining a storage device responsive to the data transaction command;
- 4       suspending the library management functions of a first library manager; and
- 5       activating the library management functions of a second library manager.
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- 7 20. The method of claim 19, further comprising notifying a host computer that the
- 8 library manager transition is in process.
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- 10 21. The method of claim 19, further comprising informing a host computer that the
- 11 library manager transition is complete.
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- 13 22. The method of claim 19, further comprising executing a previously accepted data
- 14 transaction command.
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- 16 23. The method of claim 22, further comprising terminating execution of the previously
- 17 accepted data transaction command.
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- 19 24. A computer readable storage medium comprising computer readable program code
- 20 for switching library managers, the program code configured to:
- 21       reject a data transaction command for access to a storage device, the storage
- 22 device configured to complete data transaction commands;
- 23       maintain the storage device responsive to the data transaction command;
- 24       suspend the library management functions of a first library manager; and
- 25       activate the library management functions of a second library manager.
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1 25. The computer readable storage medium of claim 24, wherein the program code is  
2 further configured to notify a host computer that a library manager transition is in process.

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4 26. The computer readable storage medium of claim 24, wherein the program code is  
5 further configured to inform the host computer that the library manager transition is  
6 complete.

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8 27. The computer readable storage medium of claim 24, wherein the program code is  
9 further configured to accept a select data transaction command type.

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11 28. The computer readable storage medium of claim 24, wherein the program code is  
12 further configured to store an accepted data transaction command.

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14 29. The computer readable storage medium of claim 28, wherein the program code is  
15 further configured to execute the accepted data transaction commands.

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17 30. The computer readable storage medium of claim 30, wherein the program code is  
18 further configured to terminate the execution of the accepted data transaction command.